

CLAIMS

1. An embroidery sewing machine with printing function (1) including a sewing machine body (2) having a bed (10), a foot (11), an arm (12), and being capable of sewing a workpiece cloth (W) by a sewing unit (99); a cloth holding frame (3) holding the workpiece cloth (W) to be sewn; a frame drive unit (4) moving the cloth holding frame 3 independently in two mutually perpendicular directions in a horizontal plane; an ink-jet printer (5) having a print head (61) printing the workpiece cloth (W) held by the cloth holding frame (3); the embroidery sewing machine with printing function (1) characterized in that

the frame drive unit (4) includes a first drive mechanism (45) that moves the cloth holding frame (3) in a first direction parallel with a lengthwise direction of the bed (10); and a second drive mechanism (30) that moves the cloth holding frame (3) in a second direction perpendicular to the first direction and

the print head (61) of the printer (5) includes nozzle arrays (61c to 61f) aligning a plurality of ink-jet nozzles (61b) parallel in the first direction and

the printer (5) prints the workpiece cloth (W) while moving the cloth holding frame (3) in the second direction by the second drive mechanism (30).

2. The embroidery sewing machine with printing function according to claim 1, characterized in that the second drive mechanism is driven by a stepping motor and has an acceleration/deceleration area where rotational speed change of the stepping motor occurs arranged in both ends of the second

direction within the cloth holding frame upon printing the workpiece cloth and the printer executes printing operation exclusive of the acceleration/deceleration area.

5 3. The embroidery sewing machine with printing function according to claim 1, characterized in that the print head further comprises a plurality of nozzle arrays aligned in the second direction.

10 4. The embroidery sewing machine with printing function according to claim 1, characterized in that the cloth holding frame is arranged so that a length in the second direction is greater than a length in the first direction.

15 5. The embroidery sewing machine with printing function according to claim 1, characterized in that the printer includes a purging mechanism that purge the print head, and a cap mechanism that cover the print head with a cap.

20 6. The embroidery sewing machine with printing function according to claim 1, characterized in that the sewing machine body and the printer are provided integrally.